



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

10/812,557

03/30/2004

Sang-Tae Kim

04-09

3682

22443

7590

07/10/2006

LAW OFFICE OF MONICA H CHOI

P O BOX 3424

DUBLIN, OH 430160204

EXAMINER

MAGEE, CHRISTOPHER R

ART UNIT

PAPER NUMBER

2627

DATE MAILED: 07/10/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/812,557

Applicant(s)

KIM ET AL.

Examiner

Christopher R. Magee

Art Unit

2627

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-14 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-14 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 30 March 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. ____. |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date <u>6/27/05</u> . | 6) <input type="checkbox"/> Other: ____.  |

## **DETAILED ACTION**

### ***Priority***

1. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

### ***Information Disclosure Statement***

2. The information disclosure statement(s) (IDS) submitted on 06/27/2005 is/are in compliance with the provisions of 37 CFR 1.97. Accordingly, the examiner has considered the information disclosure statement.

### ***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

- Claims 1-3 and 7-14 are rejected under 35 U.S.C. 102(b) as being anticipated by Lee (Korean Patent Application 10 20000025857).

- Regarding claims 1 and 10, Lee teaches a disc drive comprising:

a tray 120 for holding a disc D;

a lower case [not numbered but shown on page 20-17] on which the tray 120 is installed to be slid;

a loading motor 130 for providing a driving force that slides the tray; and

Art Unit: 2627

a spindle motor [not numbered; inherent property of disc drive] having a turntable 122 and being installed on the tray 120,

wherein the disc is secured to the turntable for being rotated by the spindle motor [Figure 4 on page 20-9].

- Regarding claim 2, Lee shows a fixing unit 123 disposed by the turntable 122 for securely holding the disc to the turntable [Figure 12 on page 20-13].

- Regarding claims 3 and 11, Lee shows the fixing unit 123 securely holds the disc to the turntable at a perimeter of a clamping hole of the disk 1 [Figure 13 on page 20-14].

- Regarding claims 7 and 12, Lee shows an optical pickup 124 installed on the tray, the optical pickup moving in a radial direction of the optical disc to write and/or reproduce information on the optical disc [Figure 16 on page 20-17].

- Regarding claims 8, 9, 13 and 14, Lee shows the disc drive is a slim vertical optical disc drive and is a half-height type disc drive [Figure 2 on page 20-8 and Figure 5 on page 20-10].

### ***Claim Rejections - 35 USC § 103***

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

- Claims 4 and 5 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lee (Korean Patent Application 10 20000025857) as applied to claim 1 above, and further in view of Konno et al (hereinafter Konno) (US 6,907,611 B2).

Art Unit: 2627

- Regarding claims 4 and 5, Lee shows all the features, *supra*, but does not show the fixing unit comprised of a plurality of hooks that elastically engage with a perimeter of a clamping hole of the disc and are disposed around a shaft of the spindle motor and above the turntable.

Konno teaches a clamp mechanism 30 that comprises of turntable 12, a rotation motor 32, a movable member 34, a spring 35 and a plurality of chuck claws 36 (i.e., hooks) functioning as holding members. The chucking claws 36 are disposed around a shaft of the spindle motor and above the turntable [Figures 2 and 3; col. 5, lines 40-45; col. 5, lines 55-57].

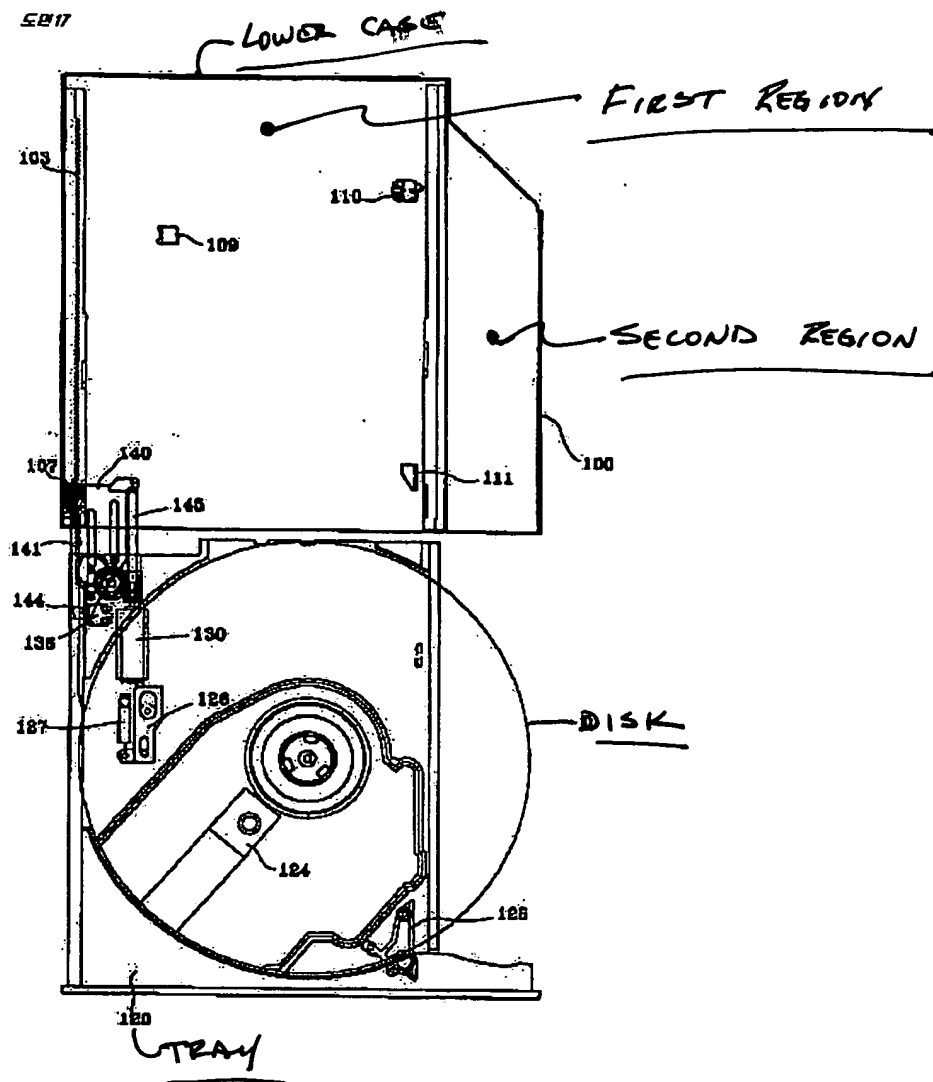
It would have been obvious to one of ordinary skill in the art at the time the invention was made to provide the fixing device of Lee with the chucking claws of Konno.

The rationale is as follows: One of ordinary skill in the art at the time of the invention would have been motivated to provide the fixing device of Lee with the chucking claws of Konno in order to offer clamping and unclamping operations for sustaining a recording medium on a turntable, independently of which attitude the recording medium takes [Konno; col. 2, lines 50-57].

- Claim 6 is rejected under 35 U.S.C. 103(a) as being unpatentable over Lee (Korean Patent Application 10 20000025857) as applied to claim 1 above.

- Regarding claim 6, Lee shows all the features, *supra*, especially a first region in which the tray is slid and a second region 100, extended sideways from the first region.

Art Unit: 2627



Lee does not teach the loading motor 130 disposed in the second region. However, it would have been obvious to one of ordinary skill in the art at the time the invention was made to shift the location of the loading motor to the second region area.

The rationale is as follows: One of ordinary skill in the art at the time of the invention would have been motivated to shift the location of the loading motor to the second region area because it is mere shift location of parts. Moving the loading motor to the second region will not

Art Unit: 2627

hamper or modify the overall operation of the disc drive. *In re Japikse*, 86 USPQ 70 (CCPA 1950).


***Conclusion***


4. The prior art made of record and not relied upon that is considered pertinent to applicant's disclosure has been annotated on PTO-492.

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Christopher R. Magee whose telephone number is (571) 272-7592. The examiner can normally be reached on M-F, 8: 00 am-4: 30 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Andrea Wellington can be reached on (571) 272-4483. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

6. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

  
**ANGEL CASTRO**  
**PRIMARY EXAMINER**

  
Christopher R. Magee  
Patent Examiner  
Art Unit 2627

June 26, 2006  
crm